

Listed Waterbody: Santa Maria and Oso Flaco**Listed Condition:** Fecal Coliform

Designated Beneficial Uses: The Basin Plan identifies beneficial uses for many of the listed waterbodies within the Santa Maria and Oso Flaco watersheds. The beneficial use likely to be impacted by fecal coliform is water contact recreation (REC-1).

Watershed Location: Northern portion of Santa Barbara County and Southern portion of San Luis Obispo County

Year added to California's CWA Section 303(d) List of Impaired Waters - 2002

Project Planning Schedule:

Task	Projected Complete	Status/Notes
Project Definition	June 2003	Complete
Draft Project Plan (including Stakeholder Plan)	December 2003	Active
Project Plan	June 2004	Active
Data Collection and Analysis	June 2006*	Not started
Preliminary Project Report	June 2007*	Not started
Project Report	June 2008*	Not started

** Actual schedule start dates are pending region-wide prioritization and allocated staff and contract resources for continued project development, and status of Region-wide Bacteria Source Analysis in Irrigated Agricultural Areas project. Staff Contact: Katie McNeill, phone: (805) 549-3336, e-mail: kmcneill@rb3.swrcb.ca.gov*

Background and Preliminary Analysis:

This Project Plan addresses multiple listings within the Oso Flaco and Santa Maria watersheds. The listed waterbodies and impairments are shown in Table 1.

Table 1. Waterbodies listed for Fecal Coliform within the Santa Maria and Oso Flaco watersheds.

Waterbody	Fecal Coliform
Oso Flaco Creek	X
Santa Maria River	X
Alamo Creek	X
Nipomo Creek	X
Bradley Canyon Creek	X
Bradley Channel	X
Blosser Channel	X
Orcutt Solomon Creek	X

The preliminary analyses that have been conducted to date are included in detail in the Project Definition; the conclusions are summarized below, along with recommendations of how to proceed with subsequent phases.

Problem Statement:

Regional Board staff evaluated fecal coliform data collected within the Oso Flaco and Santa Maria watersheds between 2000 to 2002, as part of the Central Coast Ambient Monitoring Program (CCAMP). Exceedances of REC-1 water quality objective of 400 MPN per 100 ml for fecal coliform occurred continuously at numerous monitoring locations. Staff concludes that the beneficial uses are impaired for fecal coliform in the Oso Flaco and Santa Maria watersheds.

Numeric Targets:

The REC-1 beneficial uses is protected by the numeric water quality objectives of a maximum of 10% of samples exceeding 400 MPN per 100 ml and a log mean of 200 MPN per 100 ml for fecal coliform within a 30-day period. The numeric targets for the listed waterbodies will be consistent with these values.

Source Analysis:

Regional Board staff evaluated CCAMP data, conducted field visits to the Oso Flaco and Santa Maria watersheds and evaluated topographic maps and other information to determine primary sources of fecal coliform. Additional information is needed; however, to complete the source analysis for the listed waterbodies.

From staff's preliminary analysis, the primary sources of fecal coliform to the listed waterbodies appear to be urban, rangeland, along with natural sources (i.e. birds). Staff recommends collecting additional information in order to quantify sources, allocate loads, and identify appropriate implementation actions. Staff recommends 1) obtaining more reliable and complete land use information, 2) obtaining additional existing data, and 3) conducting bacterial source tracking investigations. These efforts are discussed below.

Staff plans to evaluate available land use GIS coverages of land uses (urban, cropland, rangeland) in the Santa Maria and Oso Flaco watersheds and pursue gathering additional information (e.g. from the Cachuma Resource Conservation District) as necessary.

Staff identified existing surface and groundwater data that may assist in further developing the Source Analysis. This includes information collected by the County of Santa Barbara, Cachuma Resource Conservation District, County Flood Control District, City of Santa Maria, landfill, and wastewater treatment plants. This information will assist staff in determining relative fecal coliform concentrations being discharged from various sources.

Staff recommends collecting further information in order to develop load allocations and implementation strategies. Because there are several pathogen-impaired waterbodies within the region, we plan on incorporating Santa Maria and Oso Flaco watersheds as part of the Region-wide Bacteria Source Analysis in Irrigated Agricultural Areas project.

The basic question to be addressed in the Region-wide Bacteria Source Analysis in Irrigated Agricultural Areas project is, why are levels of indicator organisms so extremely high in the drainage ditches of irrigated agriculture when there is not an obvious source? Details of the Region-wide Bacteria Source Analysis in Irrigated Agricultural Areas project are contained as a separate Project Plan. These and other efforts are identified in the Project Planning tables.

In conjunction with the Region-wide Bacteria Source Analysis in Irrigated Agricultural Areas project, staff recommends two phases of data collection for bacteriological source identification: 1) bacterial indicator monitoring (using Colilert) at multiple locations to bracket sources and identify background levels, and 2) bacterial source investigation at several monitoring sites to

differentiate multiple or unknown sources. This information will assist staff in differentiating sources and determining appropriate implementation actions to achieve the TMDLs.

Implementation Options:

Staff anticipates that many existing implementation efforts and regulatory requirements will in part, implement the TMDLs. These include the following: 1) implementation of individual ranch and farm water quality management plans and the Santa Maria Estuary Enhancement and the Oso Flaco Watershed Management Plans, 2) implementation of the Watershed Coordinator's workplans, 3) compliance with the conditional waivers of Waste Discharge Requirements for discharges from irrigated lands, 4) implementation of the City of Santa Maria and Counties of Santa Barbara and San Luis Obispo Storm Water Management Plans (SWMPs) pursuant to the Phase II NPDES General Municipal Separate Storm Sewer System Permits (MS4), and 5) compliance with existing wastewater treatment plant NPDES permits.

Additional nonpoint source efforts have been identified that will implement the TMDL. These include, but are not limited to, permit streamlining (identified in the Watershed Coordinator's workplan) and expansion of the Santa Maria workgroup to include areas outside the existing Estuary Enhancement Plan scope (two miles upstream from the mouth). This outreach effort is part of an existing 319(h) project. In addition, Regional Board staff have prioritized Orcutt Solomon Creek for nonpoint source implementation activities. Staff is compiling an Interested Parties List for stakeholder outreach related to TMDL development.

Information to evaluate TMDL progress will include data collected in the listed waterbodies by CCAMP, data collected by the County Flood Control District where Hobbs Basin and Unit Two Ditch enter the Santa Maria River, and information obtained via the five implementation actions described previously.

Stakeholder Involvement

Staff anticipates a low-medium to medium level of stakeholder involvement in the development of the fecal coliform TMDLs. Staff based this determination on the fact that there are few competing interests; committed, formal stakeholder groups attended by Regional Board Nonpoint Source Program staff; local implementation and monitoring; and adequate time exists in the schedule. Opportunities for interested parties to be involved include: providing data and other information to Regional Board staff, and providing review and comment on the Preliminary Project Report, Project Report, and Regulatory Action Plan (i.e. Basin Plan Amendments).

Project Planning:

Staff recommends TMDLs be developed for fecal coliform based on the information collected during the Project Definition and Project Planning phases. Below is a brief overview of three project steps (Phase 3 through Phase 5), along with the subtasks and resources necessary to complete the tasks that can currently be projected in order to proceed with TMDL development. Staff may recommend addressing these listing separately depending on the results of additional data collection and stakeholder outreach.

1. Phase 3: Project Data Collection and Analysis:

Who	Regional Board (RB) staff – Katie McNeill to oversee this Phase in coordination with Shanta Keeling, the staff lead for the <u>Region-wide Bacteria Source Analysis in Irrigated Agricultural Areas</u> project.
Action Steps & Schedule	<p>RB staff proposes the following tasks for FY 04-05 and FY 05-06:</p> <p>Issues and Tasks for July 2004 – September 2004:</p> <p><u>3.1 Source Analysis – obtain additional information</u></p> <ul style="list-style-type: none"> ➤ July 2004: Coordinate with other Regional Board staff on <u>Region-wide Bacteria Source Analysis in Irrigated Agricultural Areas</u> project. ➤ August 2004: obtain additional existing fecal coliform data. ➤ September 2004: Initiate indicator monitoring to differentiate sources near existing CCAMP monitoring sites and at Correlitos Creek to gain information on background levels. <p><u>3.2 Plan Stakeholder Involvement</u></p> <ul style="list-style-type: none"> ➤ August 2004: Coordinate with other Regional Board program staff, and lead stakeholders as necessary, to communicate project initiation, expectations, progress, and information that we are relying on (i.e. water quality data, existing nonpoint source efforts); gain any additional relevant information; and answer any questions. <p>Issues and Tasks for October 2004-June 2005:</p> <p><u>3.3 Source Analysis</u></p> <ul style="list-style-type: none"> ➤ October 2004: Coordinate with other Regional Board staff on <u>Region-wide Bacteria Source Analysis in Irrigated Agricultural Areas</u> project. ➤ November 2004: evaluate existing fecal coliform data. <p><u>3.4 Stakeholder Involvement</u></p> <ul style="list-style-type: none"> ➤ Ongoing: Continue as necessary per progress of Subtask 3.2. <p><u>Deliverables:</u> June 2005: Staff will prepare a <u>Progress Report</u> summarizing data collection and preliminary analysis of data, land use category information, and public outreach and participation needs. See <u>Region-wide Bacteria Source Analysis in Irrigated Agricultural Areas</u> project.</p> <p>Issues and Tasks for July 2005-June 2006:</p> <ul style="list-style-type: none"> ➤ If any additional data collection activities are identified, they will be described in the Progress Report, along with staff resources necessary to complete the tasks, or included in the <u>Region-wide Bacteria Source Analysis in Irrigated Agricultural Areas</u> project.
Cost (PY & \$)	<p><u>Staff Resources:</u></p> <p>Fiscal Year (FY) 04-05 allocation: 0.1 Personnel Years (PY): for tasks 3.1-3.4; FY 04-05 allocation: 0.7 PY for <u>Region-wide Bacteria Source Analysis in Irrigated Agricultural Areas</u>.</p> <p><u>Contract Resources:</u> = no RB3 contract money estimated at this time</p> <p><u>Other:</u> \$200,000 - \$300,000 from contract funds.</p>
Issues	This project is dependant upon completion of <u>Region-wide Bacteria Source Analysis in Irrigated Agricultural Areas</u> project (mentioned above) and its applicability to Santa Maria and Oso Flaco watersheds. At this time, it appears that the project will specifically include or be easily extrapolated to the listed waterbodies in these watersheds.

2. Phase 4: Project Analysis - Preliminary Project Report(s):

Who	Regional Board staff – project lead scientist Stakeholders (review draft reports & information transfer)
Action Steps & Schedule	Issues and Tasks for November 2006 - June 2007: <ul style="list-style-type: none"> ➤ 4.1 Develop Draft Preliminary Project Report using the <u>Region-wide Bacteria Source Analysis in Irrigated Agricultural Areas</u> project (anticipated completion date of October 2006) and Phase 3 Progress Report. ➤ 4.2 Stakeholders review Draft Preliminary Project Report and submit comments to RB staff (or RB staff hold meeting to solicit comments). The preliminary schedule anticipates a 12-month period to progress from a Preliminary Project Report to the Project Report. <u>Deliverable:</u> <u>Preliminary Project Report(s)</u> for Santa Maria and Oso Flaco fecal coliform TMDLs. The Preliminary Project Report will describe impairment assessment, source and loading analyses, and implementation alternatives. Total Maximum Daily Loads (TMDLs) and allocations for the various sources will be included in the Preliminary Project Report. Current applicable stakeholder activities in the watershed that will reduce fecal coliform levels; such as regular workgroup meetings, and efforts performed by the County Resource Conservation Districts, will be included. Staff will also include stakeholder involvement needs for the remainder of the project.
Cost (PY & \$)	<u>Staff Resources:</u> – Fiscal Year 06-07 allocation= 0.3 Personnel Years (PY): 0.2 PY for 4.1; 0.1 PY for 4.2 <u>Contract Resources:</u> = no RB3 contract money estimated at this time <u>Other:</u> additional costs may be needed if project turns out to have a higher level of stakeholder interest than currently identified for Phase 4.
Issues	None at this time.

3. Phase 5: Regulatory Action Selection – Final Project Report(s):

Who	Regional Board staff – project lead scientist Stakeholders (review draft reports & information transfer)
Action Steps & Schedule	Issues and Tasks for June 2007 - June 2008: <ul style="list-style-type: none"> ➤ 5.1 Staff will develop the Project Report(s) (Draft Basin Plan Amendment package, or other regulatory action documentation) in consultation with state board and legal counsel. ➤ 5.2 The Project Report(s) will be made available to all regional stakeholders for further comment, following the Board's normal public comment process. <u>Deliverable:</u> Project Report(s) for Santa Maria and Oso Flaco watersheds fecal coliform TMDLs.
Cost (PY & \$)	<u>Staff Resources:</u> — Fiscal Year 07-08 allocation= 0.2 Personnel Years (PY): 0.1 PY for 5.1; 0.1 PY for 5.2 <u>Contract Resources:</u> = no RB3 contract money estimated at this time <u>Other:</u> additional costs may be needed if project turns out to have a higher level of stakeholder interest than currently anticipated

Issues	None at this time.
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Budget and Schedule Uncertainties:

Budget: Dependant upon approval and funding of Region-wide Bacteria Source Analysis in Irrigated Agricultural Areas project .

Schedule: None foreseen. See Region-wide Bacteria Source Analysis in Irrigated Agricultural Areas Project Plan for more information.

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